

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P307528

Luminaire Tested: **14FCZ2-20-UNV-L82765-CA08-W2A-U-6500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P307528
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-UNV-L82765-CA08-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 6500K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2099.0 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

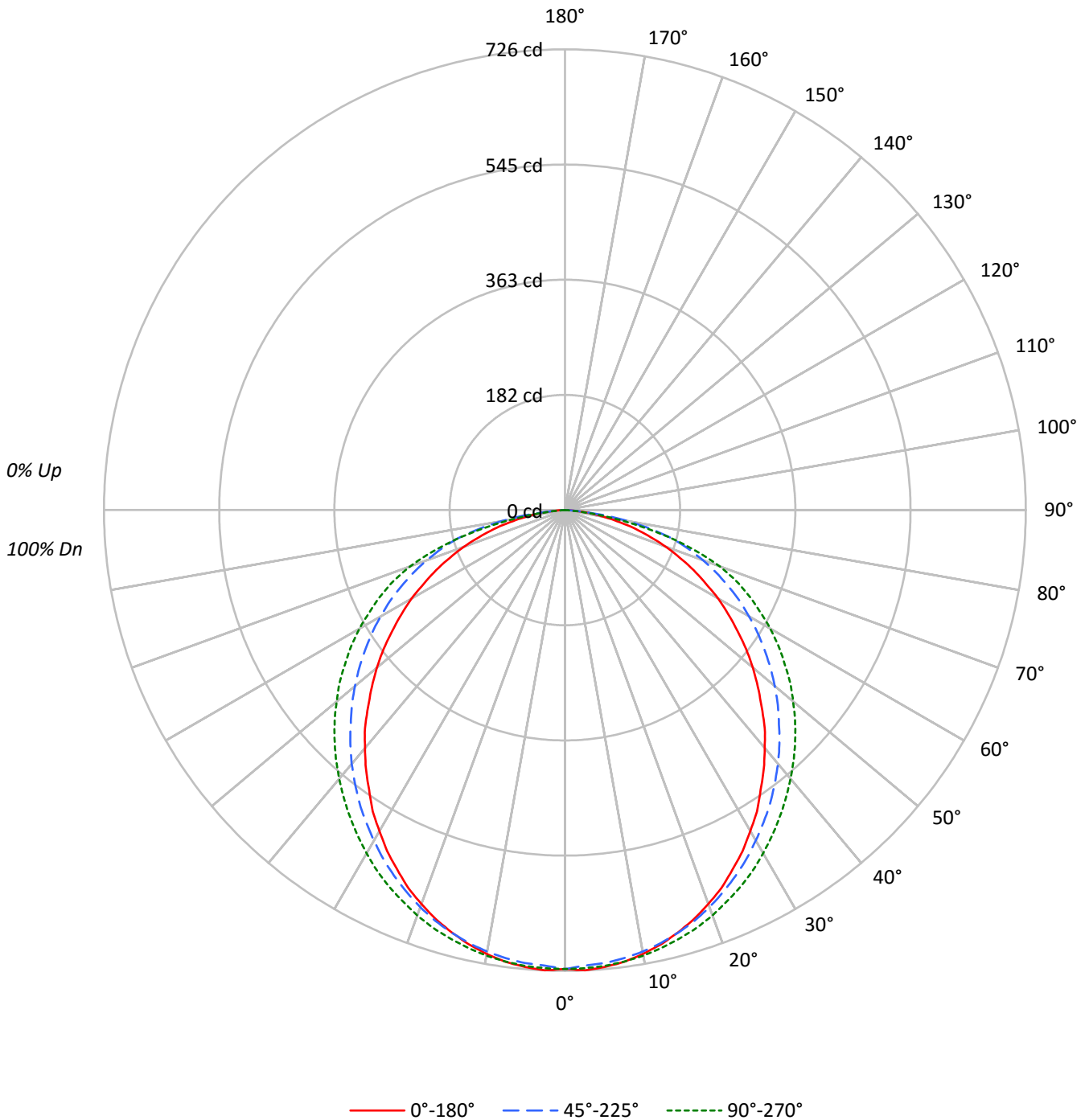
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P307528

CATALOG NUMBER: 14FC22-20-UNV-L82765-CA08-W2A-U-6500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1946	1946	1946
5°	1952	1936	1947
10°	1940	1930	1948
15°	1919	1921	1947
20°	1891	1907	1946
25°	1855	1889	1944
30°	1815	1869	1940
35°	1767	1853	1939
40°	1720	1835	1942
45°	1667	1815	1952
50°	1618	1806	1965
55°	1557	1801	1983
60°	1501	1803	2010
65°	1424	1809	2041
70°	1337	1823	2040
75°	1211	1839	1844
80°	993	1588	1313
85°	738	750	303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.4	3.3
10°-20°	195.5	9.3
20°-30°	294.5	14.0
30°-40°	353.3	16.8
40°-50°	368.3	17.5
50°-60°	340.9	16.2
60°-70°	275.5	13.1
70°-80°	168.0	8.0
80°-90°	34.7	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	558.3	26.6
0°-40°	911.7	43.4
0°-60°	1620.9	77.2
0°-90°	2099.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2099.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	723	721	717	722	721	69
15°	689	689	689	699	699	194
25°	625	629	636	652	655	288
35°	538	546	564	585	590	337
45°	438	451	477	504	513	339
55°	332	349	384	414	423	297
65°	224	246	284	313	321	221
75°	116	142	177	180	177	122
85°	24	36	24	14	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	723.1	723.1	723.1	723.1	723.1
2.5°	725.9	723.6	718.4	723.6	722.6
5°	722.6	720.8	716.6	721.7	720.8
7.5°	718.0	716.1	712.3	718.4	717.5
10°	710.0	709.1	706.3	713.3	712.8
12.5°	700.6	700.2	698.8	706.7	706.3
15°	688.9	689.4	689.4	698.8	698.8
17.5°	675.8	676.8	678.6	688.9	690.3
20°	660.4	662.3	666.0	677.7	679.6
22.5°	644.5	645.9	651.5	665.5	667.4
25°	624.8	628.6	636.1	652.0	654.8
27.5°	606.1	609.4	619.7	636.1	640.7
30°	584.1	589.3	601.4	619.2	624.4
32.5°	563.0	568.7	582.7	603.3	608.0
35°	537.8	546.2	564.0	584.6	590.2
37.5°	514.8	522.8	542.9	565.4	571.9
40°	489.6	499.4	522.3	546.2	552.7
42.5°	466.2	475.5	500.3	524.7	533.6
45°	438.1	451.2	476.9	503.6	513.0
47.5°	412.3	425.4	454.9	483.5	491.9
50°	386.6	400.6	431.5	461.0	469.4
52.5°	359.9	374.9	408.1	437.6	447.4
55°	331.8	349.2	383.8	413.7	422.6
57.5°	305.2	322.9	359.9	390.3	399.2
60°	278.9	297.2	335.1	364.1	373.5
62.5°	249.9	271.5	310.8	339.3	346.3
65°	223.7	245.7	284.1	312.6	320.6
67.5°	196.1	220.0	258.4	284.6	292.1
70°	169.9	194.7	231.7	256.0	259.3
72.5°	141.8	167.1	204.5	220.0	220.0
75°	116.5	142.3	176.9	179.7	177.4
77.5°	88.9	117.5	139.9	134.3	128.7
80°	64.1	92.2	102.5	92.2	84.7
82.5°	43.1	66.9	61.8	49.1	43.5
85°	23.9	35.6	24.3	13.6	9.8
87.5°	8.9	8.0	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)